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CLAIM AMENDMENTS

- 1. (currently amended) A method for predicting pregnancy outcome in a human female subject comprising measuring the activity of MMP—9 matrix metalloproteinase-9 in the follicular fluid from a follicle of a matured oocyte and predicting from the activity of MMP—9 matrix melloproteinase -9 measured the probability of establishing pregnancy.
- 2. (currently amended) The method-of-diagnosing the chances of pregnancy of according to claim 1, wherein the activity of MMP-9 matrix metalloproteinase -9 is measured by using zymography.
- 3. (currently amended) The method of diagnosing the chances of pregnancy of according to claim 1, wherein the diameter of the follicles selected is not less than 17mm.
- 4. (original) The method according to claim 1, which further comprises obtaining said follicular fluid from said follicle of said mature oocyte.
- 5. (currently amended) A method for predicting whether implantation of a fertilized oocyte from a human female subject will result in pregnancy in a female subject following assisted reproductive technology comprising
 - (a) removing oocytes together with follicular fluid from a female subject;
 - (b) measuring the activity of <u>matrix metalloproteinase-9 MMP-9</u> in the follicular fluid;
- (c) predicting from the activity of <u>matrix metalloproteinase-9 MMP-9</u> measured the probability of establishing pregnancy by in vitro fertilization-embryo transfer and
 - (c) fertilizing oocytes from a human female subject whose <u>matrix metalloproteinase-9 MMP-9</u> activity is above a predetermined threshold level.

Claims 6-7 (cancelled).

9.(new) The method according to claim 5, wherein the activity of matrix metalloproteinase 9 is measured by a matrix metalloproteinase-9 diagnostic kit comprising a protein substrate for matrix metalloproteinase -9, wherein said protein substrate is selected from the group consisting of collagen IV, collagen V, collagen VI, elastin, proteoglycan, and gelatin.